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## **REMARKS**

Applicant is in receipt of the Office Action mailed June 17, 2004. Claims 29 – 63 were rejected. Claims 49-52 have been cancelled. New claims 64-70 have been added. Thus, claims 29-48, and 53-70 remain pending in the application. Reconsideration of the present case is earnestly requested in light of the following.

The Office Action indicated that Applicant's arguments presented in the previous Response are moot in view of the new grounds of rejection, and specifically indicated that the arguments were directed to claims 1-28, and so were moot given that these claims are cancelled. Applicant notes that the arguments presented in the previous Response were in fact directed to new claims 29-63, and submits that insofar as these arguments address the deficiencies of the art to which they were directed, the arguments remain valid. These arguments and additional arguments directed to the new cited references are presented below.

### **Section 103 Rejections**

Claims 29, 30, 32-36, 39, 46-48, 53, 54, 57, and 58 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,675,801 to Lindsey ("Lindsey") in view of U.S. Patent No. 6,263,362 to Donoho et al. ("Donoho") and further in view of U.S. Patent No. 5,940,296 to Meyer ("Meyer"). Applicant respectfully traverses this rejection.

Claim 29 recites:

29. A method for creating a prototype for performing a machine vision process to solve a machine vision problem, the method comprising:  
displaying information indicating a plurality of machine vision problems;  
receiving user input selecting a machine vision problem from the plurality of machine vision problems; and  
automatically creating a prototype including a plurality of elements in response to the selected machine vision problem, wherein the plurality of elements are operable to

interact in order to perform a machine vision process that solves the selected machine vision problem.

As argued in the previous Response, Lindsey relates generally to an object-oriented system and method for generating target language code. A user manipulates an object-oriented user interface to select and combine objects to represent a desired computer programming function (Abstract; Col. 5 line 67 – Col. 6 line 3). “The result is an object-oriented model of the desired target language program” (Abstract), which is processed by a generator engine into source code comprising a set of code templates, each code template corresponding to a different construct in the target language and comprising fragments of code (Abstract; Col. 2 line 65 – Col. 3 line 15).

In regard to claim 29, the claim recites in part, “displaying information indicating a plurality of machine vision problems” and “receiving user input selecting a machine vision problem from the plurality of machine vision problems”. The Office Action asserts that Lindsey teaches receiving user input specifying a problem from a plurality of problems in Col. 5 line 67 – Col. 6 line 3, apparently referring to the manner in which the user manipulates the object-oriented user interface to create a representation of a desired computer programming function, as described above. Applicant respectfully disagrees.

Applicant submits that “an object-oriented model of the desired target language program” that is constructed by the user, as described by Lindsey, is not the same as “receiving user input selecting a machine vision problem from the plurality of machine vision problems”. Rather, as noted above, the “object-oriented model of the desired target language program” is more appropriately referred to a prototype of the program or function, as known to those skilled in the art of software prototyping.

Additionally, as stated in the cited portion of Lindsey (Col. 5, line 67 – Col. 6, line 3), “The user manipulates the object oriented interface via one or more of the interface devices to select and combine objects in a manner which represents the desired function.” Moreover, as stated in Col. 6, lines 12-16, in Lindsey’s system, the user is “defining instances of object oriented classes available through the object oriented user

interface. Each defined instance of a class is known as an object; the set of objects that the user defines is the object oriented program.” Applicant submits that the user’s selection and specification or definition of class instances for an object oriented program as taught by Lindsey is not at all the same as user input selecting a machine vision problem from a plurality of machine vision problems. In other words, Applicant submits that in Lindsey’s system, the user provides a prototype of the desired function in the form of the selected and combined objects, and target language code is automatically generated based on the prototype.

Thus, Applicant respectfully submits that the Examiner’s interpretation of the user created prototype (the user-selected and user-combined objects) as a user-selected problem is improper.

The Office Action also states that Lindsey teaches automatically creating a prototype including a plurality of elements in response to the specified problem wherein the plurality of elements are operable to perform a process that solves a specified problem, in Col. 2 line 65 – Col. 3 line 15. However, this portion of Lindsey relates to generating source code to implement the object-oriented program specification created by the user using the object-oriented user interface. It does not teach the concept of automatically creating a prototype based on user selection of a machine vision problem from a plurality of machine vision problems.

Applicant submits that in Lindsey’s system, the user creates a prototype of a solution (“an object oriented model of the desired target language program”), not a problem, and that Lindsey then generates program code based on the selected or specified prototype solution. Applicant submits that creating a prototype solution, then generating program code implementing that solution is quite different from selecting a problem, then generating a solution that solves the problem.

Applicant further notes that nowhere does Lindsey teach, suggest, or even hint at, machine vision processes, machine vision problems, or machine vision at all.

Regarding Donoho, as stated in the Abstract, “the invention relates to a new process of communication using computers and associated communications

infrastructure. More particularly, the invention relates to a method and apparatus for computed relevance messaging." Applicant notes that Donoho neither teaches nor suggests machine vision processes, machine vision problems, or machine vision at all. Nor does Donoho teach or suggest prototypes.

As Donoho describes in the Summary, in Donoho's system, advice providers "author advisories, which are specially structured digital documents which may contain:

- (1) Humanly-interpretable content, such as text and multimedia;
- (2) Computer-interpretable content, such as executable programs and data; and
- (3) Expressions in a special computer language called the relevance language."

Additionally, "The humanly-interpretable content in an advisory may describe the condition that triggered the relevance determination and propose an action in response to the condition, which could range from installing software to changing system settings to purchasing information or software."

Moreover, "Applications referred to as advice readers running on the computers of advice consumers periodically obtain advisories from advice servers which operate at advice sites. Advice readers process the messages so obtained and automatically interpret the relevance clauses. They determine whether a given message is relevant in the environment defined by the consumer's computer and associated devices. The user is then notified of those messages which are relevant, and the user may read the relevant advisories and invoke the recommended actions."

Thus, in Donoho's system, each advisory includes the conditions (problem) and the instructions (solution). In other words, the solution is provided with the problem statement or condition. Additionally, the advisories are retrieved by advice readers (programs running on the user's computer system) and evaluated for relevance, prior to presenting them to the user. Applicant respectfully submits that Donoho does not teach *displaying information indicating a plurality of machine vision problems, receiving user input selecting a machine vision problem from the plurality of machine vision problems; and automatically creating a prototype including a plurality of elements in response to the selected machine vision problem, wherein the plurality of elements are operable to interact in order to perform a machine vision process that solves the selected machine vision problem.*

The Office Action admits that neither Lindsey nor Donoho teaches or suggests that the problem is a machine vision problem, but then cites Meyer in an attempt to correct the deficiencies of Lindsey and Donoho. However, as the Examiner is certainly aware, to establish a prima facie obviousness of a claimed invention, all claim limitations must be taught or suggested by the prior art. In re Royka, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974), MPEP 2143.03. Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion or incentive to do so. In re Bond, 910 F. 2d 81, 834, 15 USPQ2d 1566, 1568 (Fed. Cir. 1990).

Moreover, as held by the U.S. Court of Appeals for the Federal Circuit in *Ecolchem Inc. v. Southern California Edison Co.*, an obviousness claim that lacks evidence of a suggestion or motivation for one of skill in the art to combine prior art references to produce the claimed invention is defective as hindsight analysis.

In addition, the showing of a suggestion, teaching, or motivation to combine prior teachings "must be clear and particular . . . . Broad conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence'." *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999). The art must fairly teach or suggest to one to make the specific combination as claimed. That one achieves an improved result by making such a combination is no more than hindsight without an initial suggestion to make the combination.

Applicant respectfully submits that neither Lindsey nor Donoho nor Meyer provides a motivation to combine. For example, as noted above and as admitted by the Examiner, neither Lindsey nor Donoho suggests or even hints at machine vision problems and solutions. Applicant further notes that Meyer discloses a system for graphically constructing machine vision control sequences, but neither mentions nor hints at user-selection of a machine vision problem, and automatic creation of a solution that solves the selected problem. In fact, as stated in the Abstract, Meyers teaches a system and method "for interactively developing a graphical, control-flow structure and associated application software for use in a machine vision system". Thus, Meyers

teaches the interactive development of a solution, *not* user-selection of a problem, and automatic creation of a solution for the selected problem.

Applicant submits that the Examiner has simply selected and assembled various portions of the cited art in an attempt to produce Applicant's invention using Applicant's claim 29 as a blueprint, which is improper. Please see *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143, 227 USPQ 543, 551 (Fed. Cir. 1985) (it is insufficient to select from the prior art the separate components of the inventor's combination, using the blueprint supplied by the inventor). Applicant further submits that the only motivations to combine suggested by the Examiner are improved results of the combination, i.e., "since this allows the user to effect solutions for a number of predetermined problems...", and "since this allows the prototype to solve a number of problems relating to machine vision".

Thus, regarding the Office Action's assertion that Lindsey, Donoho, and Meyer may be combined to produce Applicant's claimed invention, Applicant submits that the combination is improper, and that even were Lindsey, Donoho, and Meyer properly combinable, which Applicant argues they are not, the resulting combination would not produce Applicant's invention as represented in claim 29. For example, Applicant submits that Lindsey does not teach selection of a machine vision problem and automatic generation of a prototype solution, as argued above, and that Donoho does not teach displaying information indicating a plurality of machine vision problems, but rather, teaches displaying advisories that include respective situations as well as proposed actions to correct the situations based on a relevance determination performed by an advice reader (see Figure 2, and col. 6, lines 2-68), and finally, that Meyer does not teach or suggest selection of a machine vision problem and automatic generation of a prototype machine vision solution. Thus, a combination of Lindsey, Donoho, and Meyer still would not produce Applicant's invention as represented in claim 29.

Applicant thus submits that claim 29 and its dependent claims are patentably distinct and non-obvious over the cited art, and are thus allowable, for at least the reasons given above. In addition, the claims dependent on claim 29 recite numerous elements

that are not disclosed or suggested by the cited references, taken either singly or in combination. Inasmuch as independent claims 53, 54, and 57 recite elements similar to those of claim 29, Applicant also believes these claims and their dependent claims to be patentably distinct and non-obvious, and thus allowable for at least the reasons presented above.

Removal of the section 103 rejection of claims 29, 30, 32-36, 39, 46-48, 53, 54, 57, and 58 is earnestly requested.

Claims 49 and 51 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,675,801 to Lindsey ("Lindsey") in view of U.S. Patent No. 5,940,296 to Meyer ("Meyer"). Applicant has cancelled claim 49 and claims dependent from claim 49, and so the rejection of claims 49 and 51 is rendered moot.

#### **New Claims**

New claims 64-70 have been added to more completely claim Applicant's invention. Support for claims 64-68 and 70 may be found in Figures 6 and 7, and in descriptions thereof (see page 2, lines 21-22, page 5, lines 12-13, page 7, lines 5-6, and elsewhere in the Specification). Support for new claim 69 may be found on page 6, lines 6-17, and page 21, lines 21-24. Applicant believes that new claim 69 includes features and limitations that have been shown to be patentably distinct and non-obvious over the cited art, and so submits that claim 69 and claims dependent therefrom are allowable.

For at least the reasons presented above, Applicant respectfully submits that the claims as currently presented are patentably distinct over Lindsey, Donoho, and Meyer, either singly or in combination.

Applicant also asserts that numerous ones of the dependent claims recite further distinctions over the cited art. However, since the independent claims have been shown to be patentably distinct, a further discussion of the dependent claims is not necessary at this time.



## CONCLUSION

In light of the above remarks, Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert & Goetzel PC Deposit Account No. 50-1505/5150-44800/JCH.

Also enclosed herewith are the following items:

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Respectfully submitted,



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